

NATIONAL TRANSPORTATION SAFETY BOARD

Meeting of May 20, 2025

(Information subject to editing)

Collision of Motorcoach with Combination Vehicles Parked Along Exit Ramp to I-70 Rest Area, Highland, Illinois, July 12, 2023

HWY23MH015

This is a synopsis from the NTSB's report and does not include the Board's rationale for the findings, probable cause, and safety recommendations. NTSB staff is currently making final revisions to the report from which the attached findings and safety recommendations have been extracted. The final report and pertinent safety recommendation letters will be distributed to recommendation recipients as soon as possible. The attached information is subject to further review and editing to reflect changes adopted during the Board meeting.

Executive Summary

What Happened

On Wednesday, July 12, 2023, about 1:48 a.m. central daylight time, a 2014 Prevost 50-passenger motorcoach with 21 occupants was westbound on Interstate 70 (I-70), near Highland, Madison County, Illinois. The motorcoach was owned and operated by Greyhound Lines, Inc., and was on a scheduled route from Indianapolis, Indiana, to St. Louis, Missouri. As the motorcoach approached the westbound Silver Lake Rest Area near mile marker 27.4, the motorcoach departed I-70 onto the rest area exit ramp, where it collided with three combination vehicles that were parked on the ramp's right shoulder. As a result, three motorcoach passengers were fatally injured. The driver and 11 motorcoach passengers sustained injuries ranging from minor to serious. The three truck drivers, who were inside their vehicles at the time of the crash, were uninjured.

What We Found

We found that none of the following led to the crash: highway design; weather and roadway conditions; the motorcoach's mechanical condition; the motorcoach driver's medical qualification, training and experience, cell phone use, use of alcohol or other drugs, or a sudden incapacitating medical event. We also found that the emergency response was timely and adequate. In addition, we found that the crash dynamics and passenger statements indicate that the motorcoach driver was fatigued; Greyhound's variable scheduling practices led to his irregular sleep schedule and resulting fatigue. Also, the motorcoach driver's prolonged time awake,

his decision not to use provided rest facilities, and possibly his medical conditions contributed to his fatigue at the time of the crash. We found that had Greyhound implemented a comprehensive fatigue management program, the likelihood of fatigued driving and the crash risk would have been reduced. Also, despite initial positive action by Greyhound in response to previous NTSB recommendations, Greyhound over time reverted to unsafe practices; had Greyhound implemented a progressive discipline policy, the motorcoach driver's unsafe driving could have been mitigated before the crash. Further, we found that Greyhound's incomplete and paper-based personnel records likely contributed to insufficient driver oversight and a lack of disciplinary actions for the motorcoach driver. In addition, we found that Greyhound did not use its driver monitoring system to its full potential with regard to disciplinary policy, fatigued driving detection, and real-time driver alerts, and thus the company missed identifying that the motorcoach driver was at high risk for a crash. Further, we found that applying *Safety Management Cycle* processes for all safety policies would allow Greyhound and other motor carriers to mitigate deficiencies and encourage safety beyond compliance with federal regulations. Also, we found that federal guidance on using driver monitoring systems in driver coaching can encourage motor carriers to implement policies that reduce unsafe driver behaviors that can lead to crashes. We found that hours-of-service regulations for commercial drivers would be more effective if they addressed the risk of driving at night during drivers' circadian low. Further, we found that had the seriously injured motorcoach passengers been properly belted, some of the injuries would have been reduced; and had the motorcoach driver instructed the passengers pretrip to wear the available seat belts, they would more likely have been properly belted and their injuries reduced.

We found that combination vehicles routinely park on the Silver Lake Rest Area exit ramp shoulder because of limited truck parking, which increases the risk of collision. The three crash-involved combination vehicles were parked in the highway clear zone, which decreased the motorcoach driver's ability to stop or return his vehicle to the roadway. In addition, we found that the limited truck parking and subsequent unsafe parking is consistent with lack of long-term truck parking spaces on the National Highway System, as reported by Jason's Law-related surveys. Further, we found that continued deployment of the Truck Parking Information Management System can improve truck parking access and the expansion of access and usage, although it is not a standalone solution. In addition, we found that truck parking shortages require solutions that increase parking capacity as well as information about parking availability along the nation's highway system. Finally, we found that although state efforts to improve truck parking information and capacity are positive, a centralized effort can more broadly address the safety risk caused by lack of truck parking nationwide.

The National Transportation Safety Board determines that the probable cause of the Highland, Illinois, crash was the motorcoach driver's departure of the motorcoach from the travel lanes onto the shoulder of the exit ramp due to fatigue. Contributing to the motorcoach driver's fatigue was his irregular work-rest schedule and prolonged time awake. Contributing to the crash was the failure of Greyhound Lines, Inc. to mitigate the motorcoach driver's recurring unsafe driving behaviors. Also contributing to the crash were the three combination vehicles parked on the shoulder of the exit ramp, although prohibited by Illinois Statute Section 11-1303, due to the recurring lack of available truck parking. Contributing to the injury severity for some of the motorcoach passengers was their lack of seat belt use.

What We Recommended

As a result of this investigation, we recommended that the US Department of Transportation expand the use of the Truck Parking Information Management System to identify the need for additional truck parking and pursue available options to expand commercial vehicle parking, such as grants for states, local governments, and other entities to increase parking and cover parking facility maintenance costs, ending restrictions on private development, and seeking additional Congressional appropriations. We also recommended that the Federal Motor Carrier Safety Administration provide guidance for passenger motor carriers to implement *Safety Management Cycle* processes and reassess these processes during changes in ownership/management and periodically after implementation of new safety policies or technologies. Further, we recommended that Greyhound Lines, Inc. establish a fatigue management program based on the North American Fatigue Management Program to educate its drivers and other personnel about fatigue; revise its scheduling policies to reduce irregular work-rest cycles; create an electronic personnel file management system that is easily accessible to terminal managers and safety personnel, both on and off site; incorporate driver monitoring systems in safety and disciplinary policies to address unsafe driver behaviors; establish written policy to proactively apply *Safety Management Cycle* processes when new safety policy or technology is adopted; and require pretrip safety briefings for passengers at every terminal, covering requirements to wear seat belts and ways to address urgent onboard safety concerns, and information about emergency equipment/exits. We also recommended that the National Coalition on Truck Parking publish an updated report that proposes solutions to the truck parking shortage (at a minimum, expanding grants and funding, ending restrictions on private development, enhancing the Truck Parking Information Management System coverage) and also projecting future truck parking needs. Finally, we recommended that the American Bus Association and the United Motorcoach Association inform their members about this crash and urge them to develop fatigue management programs based on the North American Fatigue Management Program.

In addition, we reiterated an existing recommendation to the Federal Motor Carrier Safety Administration to incorporate fatigue mitigation in its regulations for passenger-carrying drivers operating at night during circadian lows, and we reiterated and classified an existing recommendation to the Federal Motor Carrier Safety Administration to provide guidance to motor carriers in using onboard video recorders to aid driver training and compliance with safety regulations.

Findings

1. None of the following were factors in the crash: (1) highway design, markings, lighting, and signage; (2) weather and roadway conditions; (3) the motorcoach's mechanical condition; (4) the motorcoach driver's medical qualification, training and experience, cell phone use, or use of alcohol or other drugs; and (5) a sudden impairing or incapacitating medical event affecting the motorcoach driver.
2. The emergency response was timely and adequate.
3. The crash dynamics, failure to navigate the roadway geometry, and passenger statements are consistent with a fatigued motorcoach driver.
4. The motorcoach driver's medical conditions increased his risk of fatigue at the time of the crash.
5. The motorcoach driver's prolonged period awake, including his decision not to use provided rest facilities, contributed to his fatigue at the time of the crash.
6. Greyhound's variable scheduling practices led to the motorcoach driver's irregular sleep schedule, resulting in his fatigued state.
7. Had Greyhound implemented a comprehensive fatigue management program, the likelihood of fatigued driving and the crash risk would have been reduced.
8. Had Greyhound implemented a progressive discipline policy, the company could have mitigated the motorcoach driver's unsafe driving behavior before the crash.
9. Greyhound's incomplete and paper-based personnel records likely contributed to insufficient driver oversight and a lack of disciplinary actions for the motorcoach driver.

10. Greyhound was not using its driver monitoring system to its full potential for driver oversight, such as incorporating a progressive discipline policy, detecting driver behavior indicative of fatigued driving, and providing real-time driver alerts; therefore, the company missed the opportunity to identify that the motorcoach driver was at high risk for a crash.
11. Proactive application of *Safety Management Cycle* processes for all safety policies would allow Greyhound and other motor carriers to mitigate deficiencies and encourage robust safety culture, beyond compliance with federal regulations.
12. Federal guidance on proactively using driver monitoring systems to provide driver coaching can encourage motor carriers such as Greyhound to implement effective policies that reduce unsafe driver behaviors that can lead to a crash.
13. The commercial motor vehicle hours-of-service regulations for motorcoach and bus drivers would be more effective if they addressed the scientifically established risk of drivers operating during the nighttime window of circadian low.
14. Had the seriously injured motorcoach passengers seated outside the intrusion zone properly worn the available lap/shoulder belts, they would have been more likely to stay in their seating compartments, which would have reduced their injuries.
15. Had the motorcoach driver conducted a pretrip safety briefing to the passengers when they departed Indianapolis, informing them of the availability of the seat belts and the legal requirement to wear them, passengers might have been more likely to be belted when the crash occurred, and their injuries reduced.
16. Combination vehicles routinely park on the shoulder of the exit ramp to the Silver Lake Rest Area due to recurring lack of available truck parking, which increases the risk of them being struck by an errant highway vehicle.
17. The combination vehicles were unsafely parked in the highway clear zone of the exit ramp to the Silver Lake Rest Area, decreasing the motorcoach driver's ability to stop or return his vehicle to the roadway after it departed the travel lane.
18. The limited truck parking capacity and subsequent unsafe parking observed at the Silver Lake Rest Area were consistent with a lack of access to long-term parking spaces for combination vehicles on the National Highway System, as reported by surveys resulting from Jason's Law.

19. Continued deployment of the Truck Parking Information Management System can improve access to truck parking and allow for targeted expansion of access and usage, although it is not a standalone solution.
20. Truck parking shortages require solutions that increase parking capacity as well as information about parking availability along the nation's highway system.
21. State efforts to implement the Truck Parking Information Management System and increase truck parking capacity, such as in North Carolina, Illinois, and Oregon, are positive; however, individual states are limited in what they can do, and a centralized effort can more broadly address the safety risk caused by lack of available truck parking throughout the country.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the Highland, Illinois, crash was the motorcoach driver's departure of the motorcoach from the travel lanes onto the shoulder of the exit ramp due to fatigue. Contributing to the motorcoach driver's fatigue was his irregular work-rest schedule and prolonged time awake. Contributing to the crash was the failure of Greyhound Lines, Inc. to mitigate the motorcoach driver's recurring unsafe driving behaviors. Also contributing to the crash were the three combination vehicles parked on the shoulder of the exit ramp, although prohibited by Illinois Statute Section 11-1303, due to the recurring lack of available truck parking. Contributing to the injury severity for some of the motorcoach passengers was their lack of seat belt use.

Recommendations

New Recommendations

To the US Department of Transportation:

1. Expand efforts to use the Truck Parking Information Management System to identify rest areas in critical need of additional truck parking.
2. Pursue available options to increase commercial vehicle parking capacity on highways; such as establishing a grant program for states, local governments, and other eligible entities to increase parking for commercial motor vehicles; assessing the feasibility of expanding eligibility for grant programs to allow for parking facility maintenance costs; evaluating the benefits of ending restrictions on private development of rest areas; and seeking additional Congressional appropriations as necessary.

To the Federal Motor Carrier Safety Administration:

3. Provide guidance through a passenger carrier safety publication on your website, encouraging passenger motor carriers to implement *Safety Management Cycle* processes and reassess these processes during changes in ownership or executive management, and periodically after implementation of new safety policies or technologies.

To Greyhound Lines, Inc.:

4. Develop and implement a fatigue management program based on the North American Fatigue Management Program to educate your drivers, dispatchers, and other employees about fatigue, its causes, and its countermeasures.
5. Revise driver scheduling policies to reduce scheduling variability that results in irregular work-rest cycles.
6. Create an electronic personnel file management system to ensure that all driver records—including those pertaining to disciplinary action—are easily accessible to terminal managers and safety personnel, both on and off site.
7. Incorporate recorded driver monitoring system events into safety and disciplinary policies, including:
 - Detection and prevention of fatigued driving;
 - Allowable number of critical safety violations a driver can have in a specific time frame (such as per month, per quarter); and
 - Procedures to hold poorly performing drivers accountable, to include both coaching and disciplinary action up to and including termination for exceeding established thresholds.
8. Establish a written policy to proactively apply *Safety Management Cycle* processes beyond compliance reviews to assess the ongoing effectiveness of new safety policies and technologies after they are adopted.

9. Establish policies to require pretrip safety briefings every time there is a change of driver, at every terminal before departure regardless of departure time, and every time the motorcoach takes on new passengers. This should include driver briefings for awareness on which states they will be driving through that have mandatory enforcement of seat belts. At a minimum, briefings should include the following information:
 - the availability of seat belts, the potential legal requirement to wear them in mandatory enforcement states, and how to fasten them;
 - ways to address urgent onboard safety concerns, including dialing 911; and
 - the location and use of the fire extinguisher and the emergency exits.

To the National Coalition on Truck Parking:

10. Publish an updated report that proposes solutions to truck parking capacity shortages, including expanding grant programs and funding of maintenance costs, ending restrictions on private development at rest areas, enhancing the Truck Parking Information Management System coverage to identify areas in critical need of additional parking, and projecting future truck volume and parking needs.

To the American Bus Association and the United Motorcoach Association:

11. Inform your members about the Highland, Illinois, crash and urge them to develop fatigue management programs based on the North American Fatigue Management Program to educate drivers and other employees about fatigue, its causes, and its countermeasures.

Reiterated Recommendation

To the Federal Motor Carrier Safety Administration:

Incorporate scientifically based fatigue mitigation strategies into the hours-of-service regulations for passenger-carrying drivers who operate during the nighttime window of circadian low. (H-12-30)

Reiterated and Classified Recommendation

To the Federal Motor Carrier Safety Administration:

Provide guidance to motor carriers to proactively use the onboard video event recorder information to aid in driver training and ensure driver compliance with regulatory rules essential for safe operation. (H-22-4)

The classification status of Safety Recommendation H-22-4 is hereby changed from Open–Acceptable Response to Open–Unacceptable Response.